#### Subpart LLL—National Emission Standards for Hazardous Air Pollutants From the Portland Cement Manufacturing Industry

Source:  $64\ FR\ 31925$ , June 14, 1999, unless otherwise noted.

#### GENERAL

## §63.1340 Applicability and designation of affected sources.

- (a) Except as specified in paragraphs (b) and (c) of this section, the provisions of this subpart apply to each new and existing portland cement plant which is a major source or an area source as defined in §63.2.
- (b) The affected sources subject to this subpart are:
- (1) Each kiln and each in-line kiln/raw mill at any major or area source, including alkali bypasses, except for kilns and in-line kiln/raw mills that burn hazardous waste and are subject to and regulated under subpart EEE of this part:
- (2) Each clinker cooler at any portland cement plant which is a major source:
- (3) Each raw mill at any portland cement plant which is a major source;
- (4) Each finish mill at any portland cement plant which is a major source;
- (5) Each raw material dryer at any portland cement plant which is a major source and each greenfield raw material dryer at any portland cement plant which is a major or area source;
- (6) Each raw material, clinker, or finished product storage bin at any portland cement plant which is a major source:
- (7) Each conveying system transfer point at any portland cement plant which is a major source;
- (8) Each bagging system at any portland cement plant which is a major source: and
- (9) Each bulk loading or unloading system at any portland cement plant which is a major source.
- (c) For portland cement plants with on-site nonmetallic mineral processing facilities, the first affected source in the sequence of materials handling operations subject to this subpart is the raw material storage, which is just

prior to the raw mill. The primary and secondary crushers and any other equipment of the on-site nonmetallic mineral processing plant which precedes the raw material storage are not subject to this subpart. Furthermore, the first conveyor transfer point subject to this subpart is the transfer point associated with the conveyor transferring material from the raw material storage to the raw mill.

(d) The owner or operator of any affected source subject to the provisions of this subpart is subject to title V permitting requirements.

#### §63.1341 Definitions.

All terms used in this subpart that are not defined in this section have the meaning given to them in the CAA and in subpart A of this part.

Alkali bypass means a duct between the feed end of the kiln and the preheater tower through which a portion of the kiln exit gas stream is withdrawn and quickly cooled by air or water to avoid excessive buildup of alkali, chloride and/or sulfur on the raw feed. This may also be referred to as the "kiln exhaust gas bypass".

Bagging system means the equipment which fills bags with portland cement.

Clinker cooler means equipment into which clinker product leaving the kiln is placed to be cooled by air supplied by a forced draft or natural draft supply system.

Continuous monitor means a device which continuously samples the regulated parameter specified in §63.1350 of this subpart without interruption, evaluates the detector response at least once every 15 seconds, and computes and records the average value at least every 60 seconds, except during allowable periods of calibration and except as defined otherwise by the continuous emission monitoring system performance specifications in appendix B to part 60 of this chapter.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a facility. Conveying systems include but are not limited to the following: feeders, belt conveyors, bucket elevators and pneumatic systems.

Conveying system transfer point means a point where any material including but not limited to feed material, fuel, clinker or product, is transferred to or from a conveying system, or between separate parts of a conveying system.

Dioxins and furans (D/F) means tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans.

Facility means all contiguous or adjoining property that is under common ownership or control, including properties that are separated only by a road or other public right-of-way.

Feed means the prepared and mixed materials, which include but are not limited to materials such as limestone, clay, shale, sand, iron ore, mill scale, cement kiln dust and flyash, that are fed to the kiln. Feed does not include the fuels used in the kiln to produce heat to form the clinker product.

Finish mill means a roll crusher, ball and tube mill or other size reduction equipment used to grind clinker to a fine powder. Gypsum and other materials may be added to and blended with clinker in a finish mill. The finish mill also includes the air separator associated with the finish mill.

Greenfield kiln, in-line kiln/raw mill, or raw material dryer means a kiln, in-line kiln/raw mill, or raw material dryer for which construction is commenced at a plant site (where no kilns and no inline kiln/raw mills were in operation at any time prior to March 24, 1998) after March 24, 1998.

*Hazardous waste* is defined in §261.3 of this chapter.

In-line kiln/raw mill means a system in a portland cement production process where a dry kiln system is integrated with the raw mill so that all or a portion of the kiln exhaust gases are used to perform the drying operation of the raw mill, with no auxiliary heat source used. In this system the kiln is capable of operating without the raw mill operating, but the raw mill cannot operate without the kiln gases, and consequently, the raw mill does not generate a separate exhaust gas stream.

Kiln means a device, including any associated preheater or precalciner devices, that produces clinker by heating limestone and other materials for subsequent production of portland cement.

Kiln exhaust gas bypass means alkali bypass.

Monovent means an exhaust configuration of a building or emission control device (e. g. positive pressure fabric filter) that extends the length of the structure and has a width very small in relation to its length (i. e., length to width ratio is typically greater than 5:1). The exhaust may be an open vent with or without a roof, louvered vents, or a combination of such features.

New brownfield kiln, in-line kiln raw mill, or raw material dryer means a kiln, in-line kiln/raw mill or raw material dryer for which construction is commenced at a plant site (where kilns and/or in-line kiln/raw mills were in operation prior to March 24, 1998) after March 24, 1998.

One-minute average means the average of thermocouple or other sensor responses calculated at least every 60 seconds from responses obtained at least once during each consecutive 15 second period.

Portland cement plant means any facility manufacturing portland cement.

Raw material dryer means an impact dryer, drum dryer, paddle-equipped rapid dryer, air separator, or other equipment used to reduce the moisture content of feed materials.

Raw mill means a ball and tube mill, vertical roller mill or other size reduction equipment, that is not part of an in-line kiln/raw mill, used to grind feed to the appropriate size. Moisture may be added or removed from the feed during the grinding operation. If the raw mill is used to remove moisture from feed materials, it is also, by definition, a raw material dryer. The raw mill also includes the air separator associated with the raw mill.

Rolling average means the average of all one-minute averages over the averaging period.

Run average means the average of the one-minute parameter values for a run.

TEQ means the international method of expressing toxicity equivalents for dioxins and furans as defined in U.S. EPA, Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-p-dioxins and -dibenzofurans (CDDs and CDFs) and 1989 Update, March 1989.

EMISSION STANDARDS AND OPERATING LIMITS

#### §63.1342 Standards: General.

(a) Table 1 to this subpart provides cross references to the 40 CFR part 63, subpart A, general provisions, indi-

cating the applicability of the general provisions requirements to subpart LLL.

(b) Table 1 of this section provides a summary of emission limits and operating limits of this subpart.

TABLE 1 TO § 63.1342.—EMISSION LIMITS AND OPERATING LIMITS

Affected source	Pollutant or opacity	Emission and operating limit
All kilns and in-line kiln/raw mills at major sources (including alkali bypass). All kilns and in-line kiln/raw mills at major and area sources (including alkali bypass).	PM	0.15 kg/Mg of feed (dry basis). 20 percent. 0.20 ng TEQ/dscm or 0.40 ng TEQ/dscm when the average of the performance test run average particulate matter control device (PMCD) inlet tem- peratures is 204° C or less. [Corrected to 7 percent oxygen] Operate such that the three-hour rolling aver- age PMCD inlet temperature is no greater than the temperature established at per- formance test. If activated carbon injection is used: Operate such that the three-hour rolling average activated carbon injection rate is no less than rate established at performance test. Operate such that either the carrier gas flow rate or carrier gas pressure drop ex- ceeds the value established at perform- ance test. Inject carbon of equivalent spec- ifications to that used at performance test.
New greenfield kilns and in-line kiln/raw mills at major and area sources.  All clinker coolers at major sources	PMOpacity	50 ppmvd, as propane, corrected to 7 percent oxygen. 0.050 kg/Mg of feed (dry basis) 10 percent.
All raw mills and finish mills at major sources New greenfield raw material dryers at major and area sources. All raw material dryers and material handling points at major sources.	Opacity  Opacity	10 percent. 50 ppmvd, as propane, corrected to 7 percent oxygen. 10 percent.

#### §63.1343 Standards for kilns and inline kiln/raw mills.

- (a) General. The provisions in this section apply to each kiln, each in-line kiln/raw mill, and any alkali bypass associated with that kiln or in-line kiln/raw mill.
- (b) Existing, reconstructed, or new brownfield/major sources. No owner or operator of an existing, reconstructed or new brownfield kiln or an existing, reconstructed or new brownfield in-line kiln/raw mill at a facility that is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources, any gases which:
- (1) Contain particulate matter (PM) in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln.

When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the alkali bypass are subject to this emission limit.

- (2) Exhibit opacity greater than 20 percent.
- (3) Contain D/F in excess of:
- (i) 0.20 ng per dscm  $(8.7 \times 10^{-11} \ \text{gr})$  per dscf) (TEQ) corrected to seven percent oxygen; or
- (ii) 0.40 ng per dscm  $(1.7\times10^{-10}$  gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.

- (c) Greenfield/major sources. No owner or operator that commences construction of a greenfield kiln or greenfield inline kiln/raw mill at a facility which is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:
- (1) Contain particulate matter in excess of 0.15 kg per Mg (0.30 lb per ton) of feed (dry basis) to the kiln. When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the combined particulate matter emissions from the kiln or in-line kiln/raw mill and the bypass stack are subject to this emission limit.
- (2) Exhibit opacity greater than 20 percent.
- (3) Contain D/F in excess of:

(i) 0.20 ng per dscm  $(8.7 \times 10^{-11} \text{ gr per dscf})$  (TEQ) corrected to seven percent oxygen; or

- (ii) 0.40 ng per dscm  $(1.7\times10^{-10}$  gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.
- (4) Contain total hydrocarbon (THC), from the main exhaust of the kiln or in-line kiln/raw mill, in excess of 50 ppmvd as propane, corrected to seven percent oxygen.
- (d) Existing, reconstructed, or new brownfield/area sources. No owner or operator of an existing, reconstructed, or new brownfield kiln or an existing, reconstructed or new brownfield in-line kiln/raw mill at a facility that is an area source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which contain D/F in excess of:
- (1) 0.20 ng per dscm  $(8.7 \times 10^{-11} \ \text{gr per} \ \text{dscf})$  (TEQ) corrected to seven percent oxygen; or
- (2) 0.40 ng per dscm  $(1.7\times10^{-10}~{\rm gr}$  per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.
- (e) Greenfield/area sources. No owner or operator of a greenfield kiln or a greenfield in-line kiln/raw mill at a fa-

cility that is an area source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from these affected sources any gases which:

- (1) Contain D/F in excess of:
- (i) 0.20 ng per dscm  $(8.7 \times 10^{-11} \ \text{gr})$  per dscf) (TEQ) corrected to seven percent oxygen; or
- (ii) 0.40 ng per dscm  $(1.7\times10^{-11}$  gr per dscf) (TEQ) corrected to seven percent oxygen, when the average of the performance test run average temperatures at the inlet to the particulate matter control device is 204 °C (400 °F) or less.
- (2) Contain THC, from the main exhaust of the kiln or in-line kiln/raw mill, in excess of 50 ppmvd as propane, corrected to seven percent oxygen.

## §63.1344 Operating limits for kilns and in-line kiln/raw mills.

- (a) The owner or operator of a kiln subject to a D/F emission limitation under §63.1343 must operate the kiln such that the temperature of the gas at the inlet to the kiln particulate matter control device (PMCD) and alkali bypass PMCD, if applicable, does not exceed the applicable temperature limit specified in paragraph (b) of this section. The owner or operator of an inline kiln/raw mill subject to a D/F emission limitation under §63.1343 must operate the in-line kiln/raw mill, such that:
- (1) When the raw mill of the in-line kiln/raw mill is operating, the applicable temperature limit for the main inline kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was operating is not exceeded.
- (2) When the raw mill of the in-line kiln/raw mill is not operating, the applicable temperature limit for the main in-line kiln/raw mill exhaust, specified in paragraph (b) of this section and established during the performance test when the raw mill was not operating, is not exceeded.
- (3) If the in-line kiln/raw mill is equipped with an alkali bypass, the applicable temperature limit for the alkali bypass, specified in paragraph (b) of this section and established during

the performance test when the raw mill was operating, is not exceeded.

- (b) The temperature limit for affected sources meeting the limits of paragraph (a) of this section or paragraphs (a)(1) through (a)(3) of this section is determined in accordance with §63.1349(b)(3)(iv).
- (c) The owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must operate the carbon injection system in accordance with paragraphs (c)(1) and (c)(2) of this section.
- (1) The three-hour rolling average activated carbon injection rate shall be equal to or greater than the activated carbon injection rate determined in accordance with §63.1349(b)(3)(vi).
- (2) The owner or operator shall either:
- (i) Maintain the minimum activated carbon injection carrier gas flow rate, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c), or
- (ii) Maintain the minimum activated carbon injection carrier gas pressure drop, as a three-hour rolling average, based on the manufacturer's specifications. These specifications must be documented in the test plan developed in accordance with §63.7(c).
- (d) Except as provided in paragraph (e) of this section, the owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique must specify and use the brand and type of activated carbon used during the performance test until a subsequent performance test is conducted, unless the sitespecific performance test plan contains documentation of key parameters that affect adsorption and the owner or operator establishes limits based on those parameters, and the limits on these parameters are maintained.
- (e) The owner or operator of an affected source subject to a D/F emission limitation under §63.1343 that employs carbon injection as an emission control technique may substitute, at any time, a different brand or type of activated

carbon provided that the replacement has equivalent or improved properties compared to the activated carbon specified in the site-specific performance test plan and used in the performance test. The owner or operator must maintain documentation that the substitute activated carbon will provide the same or better level of control as the original activated carbon.

#### §63.1345 Standards for clinker coolers.

- (a) No owner or operator of a new or existing clinker cooler at a facility which is a major source subject to the provisions of this subpart shall cause to be discharged into the atmosphere from the clinker cooler any gases which:
- (1) Contain particulate matter in excess of 0.050 kg per Mg (0.10 lb per ton) of feed (dry basis) to the kiln.
- (2) Exhibit opacity greater than ten percent.
  - (b) [Reserved]

## §63.1346 Standards for new and reconstructed raw material dryers.

- (a) Brownfield/major sources. No owner or operator of a new or reconstructed brownfield raw material dryer at a facility which is a major source subject to this subpart shall cause to be discharged into the atmosphere from the new or reconstructed raw material dryer any gases which exhibit opacity greater than ten percent.
- (b) Greenfield/area sources. No owner or operator of a greenfield raw material dryer at a facility which is an area source subject to this subpart shall cause to be discharged into the atmosphere from the greenfield raw material dryer any gases which contain THC in excess of 50 ppmvd, reported as propane, corrected to seven percent oxygen.
- (c) Greenfield/major sources. No owner or operator of a greenfield raw material dryer at a facility which is a major source subject to this subpart shall cause to be discharged into the atmosphere from the greenfield raw material dryer any gases which:
- (1) Contain THC in excess of 50 ppmvd, reported as propane, corrected to seven percent oxygen.
- (2) Exhibit opacity greater than ten percent.

## §63.1347 Standards for raw and finish mills.

The owner or operator of each new or existing raw mill or finish mill at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged from the mill sweep or air separator air pollution control devices of these affected sources any gases which exhibit opacity in excess of ten percent.

# § 63.1348 Standards for affected sources other than kilns; in-line kiln/raw mills; clinker coolers; new and reconstructed raw material dryers; and raw and finish mills.

The owner or operator of each new or existing raw material, clinker, or finished product storage bin; conveying system transfer point; bagging system; and bulk loading or unloading system; and each existing raw material dryer, at a facility which is a major source subject to the provisions of this subpart shall not cause to be discharged any gases from these affected sources which exhibit opacity in excess of ten percent.

## MONITORING AND COMPLIANCE PROVISIONS

## §63.1349 Performance testing requirements.

- (a) The owner or operator of an affected source subject to this subpart shall demonstrate initial compliance with the emission limits of §63.1343 and §§63.1345 through 63.1348 using the test methods and procedures in paragraph (b) of this section and §63.7. Performance test results shall be documented in complete test reports that contain the information required by paragraphs (a)(1) through (a)(10) of this section, as well as all other relevant information. The plan to be followed during testing shall be made available to the Administrator prior to testing, if requested.
- (1) A brief description of the process and the air pollution control system;
  - (2) Sampling location description(s);
- (3) A description of sampling and analytical procedures and any modifications to standard procedures;
  - (4) Test results:
- (5) Quality assurance procedures and results;

- (6) Records of operating conditions during the test, preparation of standards, and calibration procedures;
- (7) Raw data sheets for field sampling and field and laboratory analyses;
  - (8) Documentation of calculations;
- (9) All data recorded and used to establish parameters for compliance monitoring; and
- (10) Any other information required by the test method.
- (b) Performance tests to demonstrate initial compliance with this subpart shall be conducted as specified in paragraphs (b)(1) through (b)(4) of this section.
- (1) The owner or operator of a kiln subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section. The owner or operator of an in-line kiln/raw mill subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting separate performance tests as specified in paragraphs (b)(1)(i) through (b)(1)(iv) of this section while the raw mill of the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the inline kiln/raw mill is not operating. The owner or operator of a clinker cooler subject to limitations on particulate matter emissions shall demonstrate initial compliance by conducting a performance test as specified in paragraphs (b)(1)(i) through (b)(1)(iii) of this section. The opacity exhibited during the period of the Method 5 of Appendix A to part 60 of this chapter performance tests required by paragraph (b)(1)(i) of this section shall be determined as required in paragraphs (b)(1)(v) through (vi) of this section.
- (i) EPA Method 5 of appendix A to part 60 of this chapter shall be used to determine PM emissions. Each performance test shall consist of three separate runs under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. Each run shall be conducted for at least one hour, and the minimum sample volume shall be 0.85 dscm (30 dscf). The average of the three runs shall be

used to determine compliance. A determination of the particulate matter collected in the impingers ("back half") of the Method 5 particulate sampling train is not required to demonstrate initial compliance with the PM standards of this subpart. However this shall not preclude the permitting authority from requiring a determination of the "back half" for other purposes.

(ii) Suitable methods shall be used to determine the kiln or inline kiln/raw mill feed rate, except for fuels, for each

(iii) The emission rate, E, of PM shall be computed for each run using equation 1:

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#### Where:

E = emission rate of particulate matter, kg/Mg of kiln feed.

c<sub>s</sub> = concentration of PM, kg/dscm.

 $Q_{sd}$  = volumetric flow rate of effluent gas, dscm/hr.

P = total kiln feed (dry basis), Mg/hr.

(iv) When there is an alkali bypass associated with a kiln or in-line kiln/raw mill, the main exhaust and alkali bypass of the kiln or in-line kiln/raw mill shall be tested simultaneously and the combined emission rate of particulate matter from the kiln or in-line kiln/raw mill and alkali bypass shall be computed for each run using equation 2.

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#### Where:

 $E_c = the \ combined \ emission \ rate \ of \ particulate \ matter \ from \ the \ kiln \ or \ in-line \ kiln/ \ raw \ mill \ and \ bypass \ stack, \ kg/Mg \ of \ kiln \ feed.$ 

 $c_{sk} = \text{concentration of particulate matter in} \\ \text{the kiln or in-line kiln/raw mill effluent,} \\ \text{kg/dscm.} \\$ 

 $Q_{sdk}$  = volumetric flow rate of kiln or inline kiln/raw mill effluent, dscm/hr.

line kiln/raw mill effluent, dscm/hr.  $c_{sb}$  = concentration of particulate matter in

the alkali bypass gas, kg/dscm.  $Q_{sdb}$  = volumetric flow rate of alkali bypass gas, dscm/hr.

P=total kiln feed (dry basis), Mg/hr.

(v) Except as provided in paragraph (b)(1)(vi) of this section the opacity exhibited during the period of the Method 5 performance tests required by paragraph (b)(1)(i) of this section shall be

determined through the use of a continuous opacity monitor (COM). The maximum six-minute average opacity during the three Method 5 test runs shall be determined during each Method 5 test run, and used to demonstrate initial compliance with the applicable opacity limits of §63.1343(b)(2), §63.1343(c)(2), or §63.1345(a)(2).

(vi) Each owner or operator of a kiln, in-line kiln/raw mill, or clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (b)(1)(v) of this section, conduct an opacity test in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of Performance Specification 1 (PS-1) of appendix B to part 60 of this chapter is not feasible, a test shall be conducted in accordance with Method 9 of appendix A to part 60 of this chapter during each Method 5 performance test required by paragraph (b)(1)(i) of this section. The maximum six-minute average opacity shall be determined during the three Method 5 test runs, and used to demonstrate initial compliance with the applicable opacity limits §63.1343(b)(2), § 63.1343(c)(2), or §63.1345(a)(2).

(2) The owner or operator of any affected source subject to limitations on opacity under this subpart that is not subject to paragraph (b)(1) of this section shall demonstrate initial compliance with the affected source opacity limit by conducting a test in accordance with Method 9 of appendix A to part 60 of this chapter. The performance test shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. The maximum six-minute average opacity exhibited during the test period shall be used to determine whether the affected source is in initial compliance with the standard. The duration of the Method 9 performance test shall be 3-hours (30 6-minute averages), except that the duration of the Method 9 performance test may be reduced to 1-hour if the conditions of paragraphs (b)(2)(i) through (ii) of the section apply:

- (i) There are no individual readings greater than 10 percent opacity;
- (ii) There are no more than three readings of 10 percent for the first 1-hour period.
- (3) The owner or operator of an affected source subject to limitations on D/F emissions shall demonstrate initial compliance with the D/F emission limit by conducting a performance test using Method 23 of appendix A to part 60 of this chapter. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of the in-line kiln/ raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating. The owner or operator of a kiln or in-line kiln/raw mill equipped with an alkali bypass shall conduct simultaneous performance tests of the kiln or in-line kiln/raw mill exhaust and the alkali bypass, however the owner or operator of an in-line kiln/raw mill is not required to conduct a performance test of the alkali bypass exhaust when the raw mill of the in-line kiln/raw mill is not operating.
- (i) Each performance test shall consist of three separate runs; each run shall be conducted under the conditions that exist when the affected source is operating at the highest load or capacity level reasonably expected to occur. The duration of each run shall be at least three hours and the sample volume for each run shall be at least 2.5 dscm (90 dscf). The concentration shall be determined for each run and the arithmetic average of the concentrations measured for the three runs shall be calculated and used to determine compliance.
- (ii) The temperature at the inlet to the kiln or in-line kiln/raw mill PMCD, and where applicable, the temperature at the inlet to the alkali bypass PMCD, must be continuously recorded during the period of the Method 23 test, and the continuous temperature record(s)

must be included in the performance test report.

- (iii) One-minute average temperatures must be calculated for each minute of each run of the test.
- (iv) The run average temperature must be calculated for each run, and the average of the run average temperatures must be determined and included in the performance test report and will determine the applicable temperature limit in accordance with §63.1344(b).
- (v) If activated carbon injection is used for D/F control, the rate of activated carbon injection to the kiln or in-line kiln/raw mill exhaust, and where applicable, the rate of activated carbon injection to the alkali bypass exhaust, must be continuously recorded during the period of the Method 23 test, and the continuous injection rate record(s) must be included in the performance test report. In addition, the performance test report must include the brand and type of activated carbon used during the performance test and a continuous record of either the carrier gas flow rate or the carrier gas pressure drop for the duration of the test. Activated carbon injection rate parameters must be determined in accordance with paragraphs (b)(3)(vi) of this section.
- (vi) The run average injection rate must be calculated for each run, and the average of the run average injection rates must be determined and included in the performance test report and will determine the applicable injection rate limit in accordance with \$63.1344(c)(1).
- (4) The owner or operator of an affected source subject to limitations on emissions of THC shall demonstrate initial compliance with the THC limit by operating a continuous emission monitor in accordance with Performance Specification 8A of appendix B to part 60 of this chapter. The duration of the performance test shall be three hours, and the average THC concentration (as calculated from the oneminute averages) during the three hour performance test shall be calculated. The owner or operator of an in-line kiln/raw mill shall demonstrate initial compliance by conducting separate performance tests while the raw mill of

the in-line kiln/raw mill is under normal operating conditions and while the raw mill of the in-line kiln/raw mill is not operating.

(c) Except as provided in paragraph (e) of this section, performance tests required under paragraphs (b)(1) and (b)(2) of this section shall be repeated every five years, except that the owner or operator of a kiln, in-line kiln/raw mill or clinker cooler is not required to repeat the initial performance test of opacity for the kiln, in-line kiln/raw mill or clinker cooler.

- (d) Performance tests required under paragraph (b)(3) of this section shall be repeated every 30 months.
- (e) The owner or operator is required to repeat the performance tests for kilns or in-line kiln/raw mills as specified in paragraphs (b)(1) and (b)( $\hat{3}$ ) of this section within 90 days of initiating any significant change in the feed or fuel from that used in the previous performance test.
- (f) Table 1 of this section provides a summary of the performance test requirements of this subpart.

TABLE 1 TO § 63.1349.—SUMMARY OF PERFORMANCE TEST REQUIREMENTS

Affected source and pollutant	Performance test	
New and existing kiln and in-line kiln/raw mill bc PM	EPA Method 5.a	
New and existing kiln and in-line kiln/raw mill be Opacity	COM if feasible de or EPA Method 9 visual opacity readings.	
New and existing kiln and in-line kiln/raw mill bcfgD/F	EPA Method 23h.	
New greenfield kiln and in-line kiln/raw mill c THC	THC CEM (EPA PS-8A)1.	
New and existing clinker cooler PM	EPA Method 5 a.	
New and existing clinker cooler opacity	COM d.j or EPA Method 9 visual opacity readings.	
New and existing raw and finish mill opacity	EPA Method 9.aj	
New and existing raw material dryer and materials handling processes (raw material storage, clinker storage, finished product storage, conveyor transfer points, bagging, and bulk loading and unloading systems) opacity.	EPA Method 9.aj	
New greenfield raw material dryer THC	THC CEM (EPA PS-8A).i	

#### §63.1350 Monitoring requirements.

- (a) The owner or operator of each portland cement plant shall prepare for each affected source subject to the provisions of this subpart, a written operations and maintenance plan. The plan shall be submitted to the Administrator for review and approval as part of the application for a part 70 permit and shall include the following information:
- (1) Procedures for proper operation and maintenance of the affected source and air pollution control devices in order to meet the emission limits and operating limits of §§63.1343 through 63.1348;
- (2) Corrective actions to be taken when required by paragraph (e) of this section:

- (3) Procedures to be used during an inspection of the components of the combustion system of each kiln and each in-line kiln raw mill located at the facility at least once per year; and
- (4) Procedures to be used to periodically monitor affected sources subject to opacity standards under §§ 63.1346 and 63.1348. Such procedures must include the provisions of paragraphs (a)(4)(i) through (a)(4)(iv) of this section.
- (i) The owner or operator must conduct a monthly 1-minute visible emissions test of each affected source in accordance with Method 22 of Appendix A to part 60 of this chapter. The test must be conducted while the affected source is in operation.

<sup>a Required initially and every 5 years thereafter.
b Includes main exhaust and alkali bypass.
c In-line kiln/raw mill to be tested with and without raw mill in operation.
d Must meet COM performance specification criteria. If the fabric filter or electrostatic precipitator has multiple stacks, daily EPA Method 9 visual opacity readings may be taken instead of using a COM.
c Opacity limit is 20 percent.
Alkali bypass is tested with the raw mill on.
Temperature and (if applicable) activated carbon injection parameters determined separately with and without the raw mill operation.</sup> 

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BRequired initially and every 30 months thereafter.

EPA Performance Specification (PS)–8A of appendix B to 40 CFR part 60.

Opacity limit is 10 percent.

- (ii) If no visible emissions are observed in six consecutive monthly tests for any affected source, the owner or operator may decrease the frequency of testing from monthly to semi-annually for that affected source. If visible emissions are observed during any semi-annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (iii) If no visible emissions are observed during the semi-annual test for any affected source, the owner or operator may decrease the frequency of testing from semi-annually to annually for that affected source. If visible emissions are observed during any annual test, the owner or operator must resume testing of that affected source on a monthly basis and maintain that schedule until no visible emissions are observed in six consecutive monthly tests.
- (iv) If visible emissions are observed during any Method 22 test, the owner or operator must conduct a 6-minute test of opacity in accordance with Method 9 of appendix A to part 60 of this chapter. The Method 9 test must begin within one hour of any observation of visible emissions.
- (b) Failure to comply with any provision of the operations and maintenance plan developed in accordance with paragraph (a) of this section shall be a violation of the standard.
- (c) The owner or operator of a kiln or in-line kiln/raw mill shall monitor opacity at each point where emissions are vented from these affected sources including alkali bypasses in accordance with paragraphs (c)(1) through (c)(3) of this section.
- (1) Except as provided in paragraph (c)(2) of this section, the owner or operator shall install, calibrate, maintain, and continuously operate a continuous opacity monitor (COM) located at the outlet of the PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by subpart A, general provisions of this part, and according to PS-1 of appendix B to part 60 of this chapter.

- (2) The owner or operator of a kiln or in-line kiln/raw mill subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (c)(1) of this section, monitor opacity in accordance with paragraphs (c)(2)(i) through (ii) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS-1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with paragraphs (c)(2)(i) through (ii) of this section.
- (i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A of part 60 of this chapter. The Method 9 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 9 test shall be at least 30 minutes each day.
- (ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test
- (3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 20 percent. If the average opacity for any 6-minute block period exceeds 20 percent, this shall constitute a violation of the standard.
- (d) The owner or operator of a clinker cooler shall monitor opacity at each point where emissions are vented from the clinker cooler in accordance with paragraphs (d)(1) through (d)(3) of this section.
- (1) Except as provided in paragraph (d)(2) of this section, the owner or operator shall install, calibrate, maintain, and continuously operate a COM located at the outlet of the clinker cooler PM control device to continuously monitor the opacity. The COM shall be installed, maintained, calibrated, and operated as required by subpart A, general provisions of this part, and according to PS-1 of appendix B to part 60 of this chapter.

- (2) The owner or operator of a clinker cooler subject to the provisions of this subpart using a fabric filter with multiple stacks or an electrostatic precipitator with multiple stacks may, in lieu of installing the continuous opacity monitoring system required by paragraph (d)(1) of this section, monitor opacity in accordance with paragraphs  $(\dot{d})(2)(\dot{i})$  through (ii) of this section. If the control device exhausts through a monovent, or if the use of a COM in accordance with the installation specifications of PS-1 of appendix B to part 60 of this chapter is not feasible, the owner or operator must monitor opacity in accordance with paragraphs (d)(2)(i) through (ii) of this section.
- (i) Perform daily visual opacity observations of each stack in accordance with the procedures of Method 9 of appendix A of part 60 of this chapter. The Method 9 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 9 test shall be at least 30 minutes each day.
- (ii) Use the Method 9 procedures to monitor and record the average opacity for each six-minute period during the test.
- (3) To remain in compliance, the opacity must be maintained such that the 6-minute average opacity for any 6-minute block period does not exceed 10 percent. If the average opacity for any 6-minute block period exceeds 10 percent, this shall constitute a violation of the standard.
- (e) The owner or operator of a raw mill or finish mill shall monitor opacity by conducting daily visual emissions observations of the mill sweep and air separator PMCDs of these affected sources, in accordance with the procedures of Method 22 of appendix A of part 60 of this chapter. The Method 22 test shall be conducted while the affected source is operating at the highest load or capacity level reasonably expected to occur within the day. The duration of the Method 22 test shall be six minutes. If visible emissions are observed during any Method 22 visible emissions test, the owner or operator
- (1) Initiate, within one-hour, the corrective actions specified in the site spe-

- cific operating and maintenance plan developed in accordance with paragraphs (a)(1) and (a)(2) of this section; and
- (2) Within 24 hours of the end of the Method 22 test in which visible emissions were observed, conduct a visual opacity test of each stack from which visible emissions were observed in accordance with Method 9 of appendix A of part 60 of this chapter. The duration of the Method 9 test shall be thirty minutes.
- (f) The owner or operator of an affected source subject to a limitation on D/F emissions shall monitor D/F emissions in accordance with paragraphs (f)(1) through (f)(6) of this section.
- (1) The owner or operator shall install, calibrate, maintain, and continuously operate a continuous monitor to record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to, or upstream of, the kiln, in-line kiln/raw mill and/or alkali bypass PM control devices.
- (i) The recorder response range must include zero and 1.5 times either of the average temperatures established according to the requirements in §63.1349(b)(3)(iv).
- (ii) The reference method must be a National Institute of Standards and Technology calibrated reference thermocouple-potentiometer system or alternate reference, subject to approval by the Administrator.
- (2) The owner or operator shall monitor and continuously record the temperature of the exhaust gases from the kiln, in-line kiln/raw mill and alkali bypass, if applicable, at the inlet to the kiln, in-line kiln/raw mill and/or alkali bypass PMCD.
- (3) The three-hour rolling average temperature shall be calculated as the average of 180 successive one-minute average temperatures.
- (4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
- (5) When the operating status of the raw mill of the in-line kiln/raw mill is

changed from off to on, or from on to off the calculation of the three-hour rolling average temperature must begin anew, without considering previous recordings.

- (6) The calibration of all thermocouples and other temperature sensors shall be verified at least once every three months.
- (g) The owner or operator of an affected source subject to a limitation on D/F emissions that employs carbon injection as an emission control technique shall comply with the monitoring requirements of paragraphs (f)(1)
- through (f)(6) and (g)(1) through (g)(6) of this section to demonstrate continuous compliance with the D/F emission standard.

(1) Install, operate, calibrate and

- maintain a continuous monitor to record the rate of activated carbon injection. The accuracy of the rate measurement device must be  $\pm 1$  percent of the rate being measured.
- (2) Verify the calibration of the device at least once every three months.
- (3) The three-hour rolling average activated carbon injection rate shall be calculated as the average of 180 successive one-minute average activated carbon injection rates.
- (4) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average is added to the previous 179 values to calculate the three-hour rolling average.
- (5) When the operating status of the raw mill of the in-line kiln/raw mill is changed from off to on, or from on to off the calculation of the three-hour rolling average activated carbon injection rate must begin anew, without considering previous recordings.
- (6) The owner or operator must install, operate, calibrate and maintain a continuous monitor to record the activated carbon injection system carrier gas parameter (either the carrier gas flow rate or the carrier gas pressure drop) established during the D/F performance test in accordance with paragraphs (g)(6)(i) through (g)(6)(iii) of this section.
- (i) The owner or operator shall install, calibrate, operate and maintain a

device to continuously monitor and record the parameter value.

- (ii) The owner or operator must calculate and record three-hour rolling averages of the parameter value.
- (iii) Periods of time when one-minute averages are not available shall be ignored when calculating three-hour rolling averages. When one-minute averages become available, the first one-minute average shall be added to the previous 179 values to calculate the three-hour rolling average.
- (h) The owner or operator of an affected source subject to a limitation on THC emissions under this subpart shall comply with the monitoring requirements of paragraphs (h)(1) through (h)(3) of this section to demonstrate continuous compliance with the THC emission standard:
- (1) The owner or operator shall install, operate and maintain a THC continuous emission monitoring system in accordance with Performance Specification 8A, of appendix B to part 60 of this chapter and comply with all of the requirements for continuous monitoring systems found in the general provisions, subpart A of this part.
- (2) The owner or operator is not required to calculate hourly rolling averages in accordance with section 4.9 of Performance Specification 8A.
- (3) Any thirty-day block average THC concentration in any gas discharged from a greenfield raw material dryer, the main exhaust of a greenfield kiln, or the main exhaust of a greenfield inline kiln/raw mill, exceeding 50 ppmvd, reported as propane, corrected to seven percent oxygen, is a violation of the standard.
- (i) The owner or operator of any kiln or in-line kiln/raw mill subject to a D/F emission limit under this subpart shall conduct an inspection of the components of the combustion system of each kiln or in-line kiln raw mill at least once per year.
- (j) The owner or operator of an affected source subject to a limitation on opacity under §63.1346 or §63.1348 shall monitor opacity in accordance with the operation and maintenance plan developed in accordance with paragraph (a) of this section.
- (k) The owner or operator of an affected source subject to a particulate

matter standard under §63.1343 shall install, calibrate, maintain and operate a particulate matter continuous emission monitoring system (PM CEMS) to measure the particulate matter discharged to the atmosphere. The compliance deadline for installing the PM CEMS and all requirements relating to performance of the PM CEMS and implementation of the PM CEMS requirement is deferred pending further rulemaking.

- (l) An owner or operator may submit an application to the Administrator for approval of alternate monitoring requirements to demonstrate compliance with the emission standards of this subpart, except for emission standards for THC, subject to the provisions of paragraphs (l)(1) through (l)(6) of this section.
- (1) The Administrator will not approve averaging periods other than those specified in this section, unless the owner or operator documents, using data or information, that the longer averaging period will ensure that emissions do not exceed levels achieved during the performance test over any increment of time equivalent to the time required to conduct three runs of the performance test.
- (2) If the application to use an alternate monitoring requirement is approved, the owner or operator must continue to use the original monitoring requirement until approval is received to use another monitoring requirement.
- (3) The owner or operator shall submit the application for approval of alternate monitoring requirements no later than the notification of performance test. The application must contain the information specified in paragraphs (l)(3)(i) through (l)(3)(iii) of this section:
- (i) Data or information justifying the request, such as the technical or economic infeasibility, or the impracticality of using the required approach;
- (ii) A description of the proposed alternative monitoring requirement, including the operating parameter to be monitored, the monitoring approach

and technique, the averaging period for the limit, and how the limit is to be calculated; and

- (iii) Data or information documenting that the alternative monitoring requirement would provide equivalent or better assurance of compliance with the relevant emission standard.
- (4) The Administrator will notify the owner or operator of the approval or denial of the application within 90 calendar days after receipt of the original request, or within 60 calendar days of the receipt of any supplementary information, whichever is later. The Administrator will not approve an alternate monitoring application unless it would provide equivalent or better assurance of compliance with the relevant emission standard. Before disapproving any alternate monitoring application, the Administrator will provide:
- (i) Notice of the information and findings upon which the intended disapproval is based; and
- (ii) Notice of opportunity for the owner or operator to present additional supporting information before final action is taken on the application. This notice will specify how much additional time is allowed for the owner or operator to provide additional supporting information.
- (5) The owner or operator is responsible for submitting any supporting information in a timely manner to enable the Administrator to consider the application prior to the performance test. Neither submittal of an application, nor the Administrator's failure to approve or disapprove the application relieves the owner or operator of the responsibility to comply with any provision of this subpart.
- (6) The Administrator may decide at any time, on a case-by-case basis that additional or alternative operating limits, or alternative approaches to establishing operating limits, are necessary to demonstrate compliance with the emission standards of this subpart.
- (m) A summary of the monitoring requirements of this subpart is given in Table 1 to this section.

TABLE 1 TO §63.1350.—MONITORING REQUIREMENTS

Affected source/pollutant or opacity	Monitor type/operation/process	Monitoring requirements
All affected sources	Operations and maintenance plan	Prepare written plan for all affected sources and control devices.
All kilns and in-line kiln raw mills at major sources (including alkali bypass)/opacity.	Continuous opacity monitor, if applicable	Install, calibrate, maintain and operate in accordance with general provisions and with PS-1.
	Method 9 opacity test, if applicable	Daily test of at least 30-minutes, while kiln is at highest load or capacity level.
Kilns and in-line kiln raw mills at major sources (including alkali bypass)/particulate matter.	Particulate matter continuous emission monitoring system.	Deferred.
Kilns and in-line kiln raw mills at major and area sources (including alkali by- pass)/ D/F.	Combustion system inspection	Conduct annual inspection of components of combustion system.
<i>разун Б</i> п .	Continuous temperature monitoring at PMCD inlet.	Install, operate, calibrate and maintain continuous temperature monitoring and recording system; calculate three-hour rolling averages; verify temperature sensor calibration at least quarterly.
Kilns and in-line kiln raw mills at major and area sources (including alkali bypass)/ D/F (continued).	Activated carbon injection rate monitor, if applicable.	Install, operate, calibrate and maintain continuous activated carbon injection rate monitor; calculate three-hour rolling averages; verify calibration at least quarterly; install, operate, calibrate and maintain carrier gas flow rate monitor or carrier gas pressure drop monitor; calculate three-hour rolling averages; document carbon specifications.
New greenfield kilns and in-line kiln raw mills at major and area sources/THC.	Total hydrocarbon continuous emission monitor.	Install, operate, and maintain THC CEM in accordance with PS-8A; calculate 30-day block average THC concentration.
Clinker coolers at major sources/opacity	Continuous opacity monitor, if applicable	Install, calibrate, maintain and operate in accordance with general provisions and with PS-1.
	Method 9 opacity test, if applicable	Daily test of at least 30-minutes, while kiln is at highest load or capacity level.
Raw mills and finish mills at major sources/opacity.	Method 22 visible emissions test	Conduct daily 6-minute Method 22 visible emissions test while mill is operating at highest load or capacity level; if visible emissions are observed, initiate corrective action within one hour and conduct 30-minute Method 9 test within 24 hours.
New greenfield raw material dryers at major and area sources/THC.	Total hydrocarbon continuous emission monitor.	Install, operate, and maintain THC CEM in accordance with PS-8A; calculate 30-day block average THC concentration.
Raw material dryers; raw material, clinker, finished product storage bins; conveying system transfer points; bagging systems; and bulk loading and unloading systems at major sources/opacity.	Method 22 visible emissions test	As specified in operation and mainte- nance plan.

#### $\S 63.1351$ Compliance dates.

- (a) The compliance date for an owner or operator of an existing affected source subject to the provisions of this subpart is June 10, 2002.
- (b) The compliance date for an owner or operator of an affected source subject to the provisions of this subpart that commences new construction or reconstruction after March 24, 1998 is

June 9, 1999 or immediately upon startup of operations, whichever is later.

#### §63.1352 Additional test methods.

(a) Owners or operators conducting tests to determine the rates of emission of hydrogen chloride (HCl) from kilns, in-line kiln/raw mills and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under

§63.1340 are permitted to use Method 320 or Method 321 of appendix A of this part.

- (b) Owners or operators conducting tests to determine the rates of emission of hydrogen chloride (HCl) from kilns, in-line kiln/raw mills and associated bypass stacks at portland cement manufacturing facilities, for use in applicability determinations under \$63.1340 are permitted to use Methods 26 or 26A of appendix A to part 60 of this chapter, except that the results of these tests shall not be used to establish status as an area source.
- (c) Owners or operators conducting tests to determine the rates of emission of specific organic HAP from raw material dryers, kilns and in-line kiln/raw mills at portland cement manufacturing facilities, for use in applicability determinations under §63.1340 of this subpart are permitted to use Method 320 of appendix A to this part, or Method 18 of appendix A to part 60 of this chapter.

NOTIFICATION, REPORTING AND RECORDKEEPING

#### §63.1353 Notification requirements.

- (a) The notification provisions of 40 CFR part 63, subpart A that apply and those that do not apply to owners and operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a notice that contains all of the information required in a notification listed in this section, the owner or operator may send the Administrator a copy of the notice sent to the State to satisfy the requirements of this section for that notification.
- (b) Each owner or operator subject to the requirements of this subpart shall comply with the notification requirements in §63.9 as follows:
- (1) Initial notifications as required by §63.9(b) through (d). For the purposes of this subpart, a Title V or 40 CFR part 70 permit application may be used in lieu of the initial notification required under §63.9(b), provided the same information is contained in the permit application as required by §63.9(b), and the State to which the permit application has been submitted has an approved operating permit pro-

gram under part 70 of this chapter and has received delegation of authority from the EPA. Permit applications shall be submitted by the same due dates as those specified for the initial notification.

- (2) Notification of performance tests, as required by §§ 63.7 and 63.9(e).
- (3) Notification of opacity and visible emission observations required by §63.1349 in accordance with §§63.6(h)(5) and 63.9(f).
- (4) Notification, as required by §63.9(g), of the date that the continuous emission monitor performance evaluation required by §63.8(e) is scheduled to begin.
- (5) Notification of compliance status, as required by §63.9(h).

#### §63.1354 Reporting requirements.

- (a) The reporting provisions of subpart A of this part that apply and those that do not apply to owners or operators of affected sources subject to this subpart are listed in Table 1 of this subpart. If any State requires a report that contains all of the information required in a report listed in this section, the owner or operator may send the Administrator a copy of the report sent to the State to satisfy the requirements of this section for that report.
- (b) The owner or operator of an affected source shall comply with the reporting requirements specified in §63.10 of the general provisions of this part 63, subpart A as follows:
- (1) As required by §63.10(d)(2), the owner or operator shall report the results of performance tests as part of the notification of compliance status.
- (2) As required by §63.10(d)(3), the owner or operator of an affected source shall report the opacity results from tests required by §63.1349.
- (3) As required by §63.10(d)(4), the owner or operator of an affected source who is required to submit progress reports as a condition of receiving an extension of compliance under §63.6(i) shall submit such reports by the dates specified in the written extension of compliance.
- (4) As required by \$63.10(d)(5), if actions taken by an owner or operator

during a startup, shutdown, or malfunction of an affected source (including actions taken to correct a malfunction) are consistent with the procedures specified in the source's startup, shutdown, and malfunction plan specified in §63.6(e)(3), the owner or operator shall state such information in a semiannual report. Reports shall only be required if a startup, shutdown, or malfunction occurred during the reporting period. The startup, shutdown, and malfunction report may be submitted simultaneously with the excess emissions and continuous monitoring system performance reports; and

- (5) Any time an action taken by an owner or operator during a startup, shutdown, or malfunction (including actions taken to correct a malfunction) is not consistent with the procedures in the startup, shutdown, and malfunction plan, the owner or operator shall make an immediate report of the actions taken for that event within 2 working days, by telephone call or facsimile (FAX) transmission. The immediate report shall be followed by a letter, certified by the owner or operator or other responsible official, explaining the circumstances of the event, the reasons for not following the startup, shutdown, and malfunction plan, and whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
- (6) As required by §63.10(e)(2), the owner or operator shall submit a written report of the results of the performance evaluation for the continuous monitoring system required by §63.8(e). The owner or operator shall submit the report simultaneously with the results of the performance test.
- (7) Ås required by §63.10(e)(2), the owner or operator of an affected source using a continuous opacity monitoring system to determine opacity compliance during any performance test required under §63.7 and described in §63.6(d)(6) shall report the results of the continuous opacity monitoring system performance evaluation conducted under §63.8(e).
- (8) As required by §63.10(e)(3), the owner or operator of an affected source equipped with a continuous emission monitor shall submit an excess emissions and continuous monitoring sys-

tem performance report for any event when the continuous monitoring system data indicate the source is not in compliance with the applicable emission limitation or operating parameter limit

- (9) The owner or operator shall submit a summary report semiannually which contains the information specified in §63.10(e)(3)(vi). In addition, the summary report shall include:
- (i) All exceedences of maximum control device inlet gas temperature limits specified in §63.1344(a) and (b);
- (ii) All failures to calibrate thermocouples and other temperature sensors as required under §63.1350(f)(7) of this subpart; and
- (iii) All failures to maintain the activated carbon injection rate, and the activated carbon injection carrier gas flow rate or pressure drop, as applicable, as required under §63.1344(c).
- (iv) The results of any combustion system component inspections conducted within the reporting period as required under §63.1350(i).
- (v) All failures to comply with any provision of the operation and maintenance plan developed in accordance with §63.1350(a).
- (10) If the total continuous monitoring system downtime for any CEM or any continuous monitoring system (CMS) for the reporting period is ten percent or greater of the total operating time for the reporting period, the owner or operator shall submit an excess emissions and continuous monitoring system performance report along with the summary report.

#### §63.1355 Recordkeeping requirements.

(a) The owner or operator shall maintain files of all information (including all reports and notifications) required by this section recorded in a form suitable and readily available for inspection and review as required by §63.10(b)(1). The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two years of data shall be retained on site. The remaining three years of data may be retained off site. The files may be maintained on microfilm, on a

computer, on floppy disks, on magnetic tape, or on microfiche.

- (b) The owner or operator shall maintain records for each affected source as required by §63.10(b)(2) and (b)(3) of this part; and
- (1) All documentation supporting initial notifications and notifications of compliance status under §63.9;
- (2) All records of applicability determination, including supporting analyses; and
- (3) If the owner or operator has been granted a waiver under §63.8(f)(6), any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements.
- (c) In addition to the recordkeeping requirements in paragraph (b) of this section, the owner or operator of an affected source equipped with a continuous monitoring system shall maintain all records required by §63.10(c).

#### OTHER

## §63.1356 Exemption from new source performance standards.

- (a) Except as provided in paragraphs (a)(1) and (a)(2) of this section, any affected source subject to the provisions of this subpart is exempted from any otherwise applicable new source performance standard contained in 40 CFR part 60, subpart F.
- (1) Kilns and in-line kiln/raw mills, as applicable under 40 CFR 60.60(b), located at area sources are subject to PM and opacity limits and associated reporting and recordkeeping, under 40 CFR part 60, subpart F.
- (2) Greenfield raw material dryers, as applicable under 40 CFR 60.60(b), located at area sources are subject to opacity limits and associated reporting and recordkeeping under 40 CFR part 60, subpart F.

## §63.1357 Temporary, conditioned exemption from particulate matter and opacity standards.

- (a) Subject to the limitations of paragraphs (b) through (f) of this section, an owner or operator conducting PM CEMS correlation tests (that is, correlation with manual stack methods) is exempt from:
- (1) Any particulate matter and opacity standards of part 60 or part 63 of

this chapter that are applicable to cement kilns and in-line kiln/raw mills.

- (2) Any permit or other emissions or operating parameter or other limitation on workplace practices that are applicable to cement kilns and in-line kiln raw mills to ensure compliance with any particulate matter and opacity standards of this part or part 60 of this chapter.
- (b) The owner or operator must develop a PM CEMS correlation test plan. The plan must be submitted to the Administrator for approval at least 90 days before the correlation test is scheduled to be conducted. The plan must include:
- (1) The number of test conditions and the number of runs for each test condition;
- (2) The target particulate matter emission level for each test condition;
- (3) How the operation of the affected source will be modified to attain the desired particulate matter emission rate; and
- (4) The anticipated normal particulate matter emission level.
- (c) The Administrator will review and approve or disapprove the correlation test plan in accordance with  $\S63.7(c)(3)(i)$  and (iii). If the Administrator fails to approve or disapprove the correlation test plan within the time period specified in  $\S63.7(c)(3)(iii)$ , the plan shall be considered approved, unless the Administrator has requested additional information.
- (d) The stack sampling team must be on-site and prepared to perform correlation testing no later than 24 hours after operations are modified to attain the desired particulate matter emissions concentrations, unless the correlation test plan documents that a longer period is appropriate.
- (e) The particulate matter and opacity standards and associated operating limits and conditions will not be waived for more than 96 hours, in the aggregate, for a correlation test, including all runs and conditions.
- (f) The owner or operator must return the affected source to operating conditions indicative of compliance with the applicable particulate matter and opacity standards as soon as possible after correlation testing is completed.

#### §63.1358 Delegation of authority.

- (a) In delegating implementation and enforcement authority to a State under subpart E of this part, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.
- (b) Authority which will not be delegated to States:
- (1) Approval of alternative non-opacity emission standards under §63.6(g).
- (2) Approval of alternative opacity standards under §63.6(h)(9).
- (3) Approval of major changes to test methods under §§ 63.7(e)(2)(ii) and 63.7(f). A major change to a test method is a modification to a federally en-

forceable test method that uses unproven technology or procedures or is an entirely new method (sometimes necessary when the required test method is unsuitable).

- (4) Approval of major changes to monitoring under §63.8(f). A major change to monitoring is a modification to federally enforceable monitoring that uses unproven technology or procedures, is an entirely new method (sometimes necessary when the required monitoring is unsuitable), or is a change in the averaging period.
- (5) Waiver of recordkeeping under  $\S 63.10(f)$ .

#### §63.1359 [Reserved]

TABLE 1 TO SUBPART LLL.—APPLICABILITY OF GENERAL PROVISIONS

General Provisions 40 CFR Citation	Requirement	Applies to Sub- part LLL	Comment
63.1(a)(1) through (4)	Applicability	Yes.	
63.1(a)(5)	, , ,	No	[Reserved].
63.1(a)(6) through (a)(8)	Applicability	Yes.	,
63.1(a)(9)	17 3	No	[Reserved].
63.1(a)(10) through (14)	Applicability	Yes.	[[
63.1(b)(1)	Initial Applicability Determination	No	§ 63.1340 specifies applicability.
63.1(b)(2) and (3)	Initial Applicability Determination	Yes.	3 co. to to opcomes applicability.
63.1(c)(1)	Applicability After Standard Estab-	Yes.	
***	lished.		
63.1(c)(2)	Permit Requirements	Yes	Area sources must obtain Title V permits.
63.1(c)(3)		No	[Reserved].
63.1(c)(4) and (5)	Extensions, Notifications	Yes.	,
63.1(d)		No	[Reserved].
63.1(e)	Applicability of Permit Program	Yes.	[[
63.2	Definitions	Yes.	Additional definitions in §63.1341.
63.3(a) through (c)	Units and Abbreviations	Yes.	/ taditional definitions in 300.1041.
63.4(a)(1) through (a)(3)	Prohibited Activities	Yes.	
63.4(a)(4)63.4(a)(5)	Fromblied Activities	No	[Reserved].
63.4(a)(5)	Compliance date	Yes.	[IXeserved].
63.4(b) and (c)	Circumvention, Severability	Yes.	
	Construction/Reconstruction	Yes.	
63.5(a)(1) and (2)		Yes.	
63.5(b)(1)	Compliance Dates		rp
63.5(b)(2)	0	No	[Reserved].
63.5(b)(3) through (6)	Construction Approval, Applicability.	Yes.	
63.5(c)		No	[Reserved].
63.5(d)(1) through (4)	Approval of Construction/Reconstruction.	Yes.	
63.5(e)	Approval of Construction/Reconstruction.	Yes.	
63.5(f)(1) and (2)	Approval of Construction/Recon-	Yes.	
	struction.		
63.6(a)	Compliance for Standards and	Yes.	
` '	Maintenance.		
63.6(b)(1) through (5)	Compliance Dates	Yes.	
63.6(b)(6)		No	[Reserved].
63.6(b)(7)	Compliance Dates	Yes.	[1.000.100].
63.6(c)(1) and (2)	Compliance Dates	Yes.	
63.6(c)(3) and (c)(4)	Compilance Dates	No	[Reserved].
63.6(c)(5)	Compliance Dates	Yes.	[INGGGIVEU].
	Compilance Dates	No	[Boson and]
63.6(d)	Oneration 8 Maintenance		[Reserved].
63.6(e)(1) and (e)(2)	Operation & Maintenance	Yes.	
63.6(e)(3)	Startup, Shutdown Malfunction Plan.	Yes.	
63.6(f)(1) through (3)	Compliance with Emission Standards.	Yes.	

TABLE 1 TO SUBPART LLL.—APPLICABILITY OF GENERAL PROVISIONS—Continued

General Provisions 40 CFR Citation	Requirement	Applies to Sub- part LLL	Comment
	Alternative Other dend		
63.6(g)(1) through (g)(3)	Alternative Standard	Yes. Yes.	
63.6(h)(1) and (2)63.6(h)(3)	Opacity/VE Standards		Reserved
	Opacity/VE Standards	No Yes.	Reserved
63.6(h)(4) and (h)(5)(i)	Opacity/VE Standards	No	Test duration specified in Subpart
63.6(h)(5)(ii) through (iv)	Opacity/VE Standards	INO	LLL.
63.6(h)(6)	Opacity/VE Standards	Yes.	LLL.
63.6(i)(1) through (i)(14)	Extension of Compliance	Yes.	
	Extension of Compliance	No	[Posonyod]
63.6(i)(15)63.6(i)(16)	Extension of Compliance	Yes.	[Reserved].
63.6(j)	Exemption from Compliance	Yes.	
63.7(a)(1) through (a)(3)	Performance Testing Require-	Yes	§63.1349 has specific require-
00.7 (a)(1) unough (a)(0)	ments.	100	ments.
63.7(b)	Notification	Yes.	
63.7(c)	Quality Assurance/Test Plan	Yes.	
63.7(d)	Testing Facilities	Yes.	
63.7(e)(1) through (4)	Conduct of Tests	Yes.	
63.7(f)	Alternative Test Method	Yes.	
63.7(g)	Data Analysis	Yes.	
63.7(h)	Waiver of Tests	Yes.	
63.8(a)(1)	Monitoring Requirements	Yes.	
63.8(a)(2)	Monitoring	No	§ 63.1350 includes CEM requirements.
63.8(a)(3)		No	[Reserved].
63.8(a)(4)	Monitoring	No	Flares not applicable.
63.8(b)(1) through (3)	Conduct of Monitoring	Yes.	
63.8(c)(1) through (8)	CMS Operation/ Maintenance	Yes.	Performance specification super-
			sedes requirements for THC CEM. Temperature and activated carbon injection monitoring data reduction requirements given in subpart LLL.
63 8(4)	Quality Control	Yes.	ments given in subpart LLL.
63.8(e)	Quality Control Performance Evaluation for CMS	Yes	Performance specification super- sedes requirements for THC
63.8(f)(1) through (f)(5)	Alternative Monitoring Method	Yes	CEM. Additional requirements in § 1350(I).
63.8(f)(6)	Alternative to RATA Test	Yes.	3 1000(1).
63.8(g)	Data Reduction	Yes.	
63.9(a)	Notification Requirements	Yes.	
63.9(b)(1) through (5)	Initial Notifications	Yes.	
63.9(c)	Request for Compliance Extension.	Yes.	
63.9(d)	New Source Notification for Special Compliance Requirements.	Yes.	
63.9(e)	Notification of Performance Test	Yes.	
63.9(f)	Notification of VE/Opacity Test	Yes	Notification not required for VE/ opacity test under § 63.1350(e) and (j).
63.9(g)	Additional CMS Notifications	Yes.	
63.9(h)(1) through (h)(3)	Notification of Compliance Status	Yes.	
63.9(h)(4)		No	[Reserved].
63.9(h)(5) and (h)(6)	Notification of Compliance Status	Yes.	
	Adjustment of Deadlines	Yes.	
03.9(1)	Observation Description Information	Yes.	
	Change in Previous Information		
63.9(j)	Recordkeeping/Reporting	Yes	Yes.
63.9(j)	Recordkeeping/Reporting General Requirements	Yes.	
63.9(j)	Recordkeeping/Reporting	Yes. Yes	
63.9(j) 63.10(a) 63.10(b) 63.10(c)(1) 63.10(c)(2) through (c)(4)	Recordkeeping/Reporting General Requirements	Yes.	PS-8A applies. Reserved] PS-8A applies instead of require-
63.9(j) 63.10(a) 63.10(b) 63.10(c)(1) 63.10(c)(2) through (c)(4) 63.10(c)(5) through (c)(8)	Recordkeeping/Reporting General Requirements Additional CMS Recordkeeping	Yes	PS–8A applies. Reserved] PS–8A applies instead of requirements for THC CEM.
63.9(j) 63.10(a) 63.10(b) 63.10(c)(1) 63.10(c)(2) through (c)(4) 63.10(c)(5) through (c)(8) 63.10(c)(9)	Recordkeeping/Reporting General Requirements Additional CMS Recordkeeping	Yes. Yes	PS-8A applies. Reserved] PS-8A applies instead of requirements for THC CEM. [Reserved] PS-8A applies instead of require-
63.9(j) 63.10(a) 63.10(b) 63.10(c)(1) 63.10(c)(2) through (c)(4) 63.10(c)(5) through (c)(8) 63.10(c)(9) 63.10(c)(10) through (15)	Recordkeeping/Reporting	Yes. Yes No Yes No Yes	PS-8A applies. Reserved] PS-8A applies instead of require- ments for THC CEM. [Reserved]
63.9(j) 63.10(a) 63.10(b) 63.10(c)(1) 63.10(c)(2) through (c)(4) 63.10(c)(5) through (c)(8) 63.10(c)(9) 63.10(c)(10) through (15) 63.10(d)(1)	Recordkeeping/Reporting	Yes. Yes	PS-8A applies. Reserved] PS-8A applies instead of requirements for THC CEM. [Reserved] PS-8A applies instead of require-
63.9(j) 63.10(a) 63.10(b) 63.10(c)(1) 63.10(c)(2) through (c)(4) 63.10(c)(5) through (c)(8) 63.10(c)(9) 63.10(c)(10) through (15) 63.10(d)(1) 63.10(d)(1)	Recordkeeping/Reporting	Yes. Yes	PS-8A applies. Reserved] PS-8A applies instead of requirements for THC CEM. [Reserved] PS-8A applies instead of require-
63.9(j) 63.10(a) 63.10(b) 63.10(c)(1) 63.10(c)(2) through (c)(4) 63.10(c)(5) through (c)(8) 63.10(c)(9) 63.10(c)(9) 63.10(c)(10) through (15) 63.10(d)(1) 63.10(d)(1) 63.10(d)(2) 63.10(d)(3)	Recordkeeping/Reporting	Yes. Yes	PS-8A applies. Reserved] PS-8A applies instead of requirements for THC CEM. [Reserved] PS-8A applies instead of require-
63.10(a) 63.10(b) 63.10(c)(1) 63.10(c)(2) through (c)(4) 63.10(c)(5) through (c)(8) 63.10(c)(9) 63.10(c)(10) through (15) 63.10(c)(10) through (15)	Recordkeeping/Reporting	Yes. Yes	PS-8A applies. Reserved] PS-8A applies instead of requirements for THC CEM. [Reserved] PS-8A applies instead of require-

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#### Pt. 63, Subpt. LLL, Table 1

TABLE 1 TO SUBPART LLL.—APPLICABILITY OF GENERAL PROVISIONS—Continued

General Provisions 40 CFR Citation	Requirement	Applies to Sub- part LLL	Comment
63.10(e)(1) and (e)(2)		Yes.	
63.10(e)(3)	Excess Emissions and CMS Performance Reports.	Yes	Exceedences are defined in sub- part LLL.
63.10(f)	Waiver for Recordkeeping/ Reporting.	Yes.	
63.11(a) and (b)	Control Device Requirements	No	Flares not applicable.
63.12(a)–(c	)State Authority and Delegations	Yes.	
63.13(a)–(c)	State/Regional Addresses	Yes.	
63.14(a) and (b)	Incorporation by Reference	Yes.	
63.15(a) and (b)	Availability of Information	Yes.	